

95. A microwave processing method according to any one of claims 78-89, wherein the plasma process is effected by supplying high frequency to said support means.

96. A microwave processing method according to any one of claims 78-89, wherein said plasma process is film forming.

97. A microwave processing method according to any one of claims 78-89, wherein said plasma process is etching.

98. A microwave processing method according to any one of claims 78-89, wherein said plasma process is ashing.

REMARKS

Applicant now seeks to add new claims 60-98 via reissue of U.S. Patent 5,803,975. Thus, the claims now pending are claims 1-59 in the originally issued patent, in addition to newly presented claims 60-98. The claims as originally issued, specifically, claim 19 and its dependent claims 20-25, and claim 50 and its dependent claims 51-59, are too narrow in scope in view of Applicant's invention as described in the teachings of the disclosure. Further, the issued patent does not include

claims with the specificity Applicant is entitled to and within the teachings of his disclosure.

Accordingly, Applicant has now added new claims 60-77 which correspond to the subject matter found in issued claims 19-25 and new claims 78-98, which correspond to the subject matter found in issued claims 50-59.

New claim 60 is based on issued claim 19, but it omits an element found in that patent claim. More specifically, the plasma processing apparatus need not have two distinct chambers, i.e., a plasma generating chamber and a processing chamber as recited in issued claim 19. It can be readily seen from several of the Figures, including 5, 7, 10, 11 and 13, that the plasma generating chamber and the processing chamber are not two distinct, physically separated areas, as the word "chamber" suggests. Rather, these Figures show a continuous open space. In one part of the space plasma is generated and in a second, a substrate is processed. These Figures should be contrasted with Figures 9 and 12 where it is clear that there are two distinct areas which are separated by a boundary, which could more properly be referred to as chambers. In the present issued claims, the scope of the Applicant's invention is unduly limited by reciting a separate processing chamber, for as can be seen from the Figures, no such separate physical structure is required

for the invention. Thus, claim 60 also differs from claim 19 by omitting the processing chamber. New claim 64, dependent on claim 60, adds the processing chamber back into the subject matter of the claims.

Additionally, the waveguide which is a component of the claimed plasma processing apparatus can have different shapes. As can be seen from the disclosure, at col. 8, lines 36-40, the wave guide may be in the shape of a cylinder or disk and may also conform to the exterior shape of the plasma generating chamber. The specific shape of the wave guide is not included in any issued patent claim or in new independent claim 60; however, dependent claims 61-63 and 65-67 do recite the specific wave guide shapes recited in column 8.

Applicant also noted that claim 19 was written in means plus function format which may be read to unnecessarily limit the scope of the claims. Accordingly, Applicant has also submitted a new independent claim 68, which corresponds in subject matter to new claim 60, without using means plus function terminology. Applicant is also entitled to claims of this scope. New claims 69-71 depending on claim 68 have been added to specify the shapes of the wave guide tube.

The subject matter of issued claims 20-25, all of which depended directly or indirectly on claim 19, have been rewritten

as new claims 72-77 in order to: (1) exclude means plus function terminology; and (2) multiply depend on newly added claims 60-71, described above.

New claim 78 corresponds to issued claim 50 and is directed to a plasma processing method using a specifically described apparatus. This claim has been amended in the same manner as claim 19 and for the same reasons as discussed above. That is, claim 78 does not recite a processing chamber. Claims 79-81 recite specific wave guide shapes; claim 82 depends on claim 78 and requires an attached processing chamber. Claims 83-85 depend on claim 82 and recite specific wave guide shapes; independent claim 86 is the same subject matter as new claim 78 but is written to remove means plus function terminology and therefore increase its breadth; claims 87-89 depend on new claim 86 and recite specific wave guide shapes. Finally, claims 90-98 correspond to dependent claims 51-59 (dependent on claim 50). They have been rewritten to make them multiply dependent on new claims 78-89.

Applicant notes that an Information Disclosure Statement has also been filed with these reissue application papers.

Entry and consideration of the claims found in this Preliminary Amendment are earnestly requested, as well as early passage to issue of this reissue application.

1. What is the purpose of the study?
 2. What are the research questions or hypotheses?
 3. What is the study design?
 4. What are the variables being studied?
 5. What are the data collection methods?
 6. What are the results of the study?
 7. What are the conclusions of the study?
 8. What are the limitations of the study?
 9. What are the implications of the study?
 10. What are the future research directions?

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